

**Claims**

1. A process for the parallel synthesis of oligonucleotides on an alkylamino-modified matrix surface, characterized in that 3-succinate derivatives of protected nucleosides are attached thereto and oligonucleotide synthesis takes place by means of automated DNA synthesis.
2. The process according to claim 1, wherein the matrix surface is modified with methylamino groups.
3. The process according to claim 1 or 2, wherein the 3'-succinate derivatives are from  $\text{dA}^{\text{NPEOC}}$ ,  $\text{dC}^{\text{NPEOC}}$ ,  $\text{dG}^{\text{NPEOC/NPE}}$ , dT and fluorescein-labeled cD.
4. The process according to any one of claims 1 to 3, wherein the matrix is fixed in a synthesis chamber having several channels.
5. The process according to any one of claims 1 to 4, wherein the matrix is made of glass or a polymer, preferably polypropylene.
6. Use of the oligomer chip forming in the process according to any one of claims 1 to 5 in hybridization experiments or as a source of high-quality biopolymers.